

Book Review

LINDROTH, C. H., H. ANDERSSON, H. BÖDVARSSON and S. H. RICHTER. Surtsey, Iceland. The Development of a New Fauna, 1963-1970. Terrestrial Invertebrates. Entomologica Scandinavica, Supplementum 5. Munksgaard, Copenhagen. 280 pp.

Surtsey, the newest island in the Westmann chain, was created by volcanic activity in 1963. Up to 1970, 158 species of terrestrial arthropods had been found alive on the island, the best represented group being the Diptera (105 species).

The authors of this book believe that their studies on Surtsey will serve as a standard example of *overseas dispersal over moderate distances*, but not as a model of *colonization* because of adverse climatic and edaphic factors. Up to 1970 only three species of insects (2 Collembola + 1 Chironomid) and one or more mites seemed to be permanently established. But extensive colonization by bryophytes was underway, and this will soon lead to soil formation if further vulcanism does not intervene. The conditions for successful colonization by a wide range of non-halophytic plants and animals are thus becoming established, and perhaps the authors' disclaimer of the relevance of their work to colonization theory will prove too modest when the next account of their investigations is published. The Surtsey project will, I hope, be continued for several decades, and further books issued at regular intervals.

Besides the information on arrivals at Surtsey, this book contains extensive information on the fauna of the other Westmann islands and adjacent coastal districts of Iceland, which were investigated with varying degrees of thoroughness as part of the Surtsey project. There seems little doubt that the great majority of the arthropods collected on Surtsey came from these areas. I find the authors' review of dispersal to Surtsey most convincing, particularly since their hypotheses on aerial dispersal are supported by analysis of meteorological data and possible means of hydrochorous dispersal were demonstrated experimentally.

The only errors noted are as follows. In the right column of page 57 something has gone astray with the statements on "ecology". Under *Dacnusa faeroeensis* Roman it is incorrectly stated that this is known as a parasite of agromyzid flies. This statement may have been intended for the preceding species (*Dacnusa confinis* Ruthe), where there is an omission after the "ecology" heading. *Dacnusa faeroeensis* is in fact a parasite of *Scaptomyza graminum* Fall. (Drosophilidae). On page 58 it is stated that *Chorebus affinis* Nees has been bred from *Cerodontha* (Agromyzidae). We may conjecture that *affinis* is probably a *Cerodontha*-parasite, but to my knowledge it has not yet been bred.

But these few criticisms of detail do not detract from my high general estimation of this book. In my opinion nobody interested in dispersal theory should fail to read it.

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